We claim:

1. A method to monitor the response of a patient being treated for cancer by administering a anti-cancer agent, comprising the steps of:

(a) determining the level of expression of one or more one biomarker(s) in a first biological sample taken from the patient prior to treatment with the anti-cancer agent;

(b) determining the level of expression of the biomarker in at least a second biological sample taken from the patient subsequent to the initial treatment with the anti-cancer agent; and

(c) comparing the level of expression of the biomarker in the second biological sample with the level of expression of the biomarker in the first biological sample;

wherein a change in the level of expression of the biomarker in the second biological sample compared to the level of expression of biomarker in the first biological sample indicates that the effectiveness of the treatment with the anti-cancer agent agent.

2. The method of claim 1, wherein the cancer is selected form the group consisting of breast cancer, cancer of respiratory tract, brain cancer, cancer of the reproductive organs, cancer of digestive tract, cancer of urinary tract, cancer of eye, liver cancer, skin cancer, cancer of the head and neck, thyroid cancer, parathyroid cancer, lymphomas, sarcomas, and leukemias.

3. The method of claim 1, wherein said anti-cancer agent is a Raf kinase inhibitor.

4. The method of claim 1, wherein said biomarker is adrenomedullin.

5. The method of claim 1, wherein said biological sample is selected from the group consisting of blood, urine, bone marrow, and biopsy sample.

6. A method for identifying a compound useful for the treatment of cancer comprising the steps of:

(a) analyzing the level of expression of one or more genes and/or gene products in a cell or tissue sample prior to treatment with the compound;

(b) analyzing the level of expression of one or more genes and/or gene products in a cell or tissue sample subsequent to treatment with the compound;

wherein a variation in the expression level of the gene and/or gene product is indicative of drug efficacy.

7. The method of claim 6, wherein the gene or gene product is adrenomedullin.

8. A method for identifying a compound useful for the treatment of cancer comprising the steps of:

(a) analyzing the level of expression of one or more polypeptides in a cell or tissue sample prior to treatment with the compound;

(b) analyzing the level of expression of one or more polypeptides in a cell or tissue sample subsequent to treatment with the compound;

wherein a variation in the expression level of the polypeptides is indicative of drug efficacy.

9. The method of claim 6, wherein the polypeptide is adrenomedullin.

10. A kit for monitoring the efficacy of a compound in a cell or tissue sample, comprising a nucleic acid probe comprising a nucleotide sequence having at least 15 nucleotides.

11. The kit of claim 10 further comprising solutions for suspending or fixing the cells, detectable labels, hybridization solutions, solutions for lysing cells, and/or solutions for the purification of nucleic acids.

12. The kit of claim 10, wherein the nucleic acid probe comprises the nucleotide sequence SEQ ID NO: 1.

13. A kit for monitoring the efficacy of a compound in a cell or tissue sample, comprising an antibody specific for a protein.

14. The kit of claim 13 further comprising solutions for suspending or fixing the cells, detectable labels, solutions for rendering a polypeptide susceptible to the binding of an antibody, solutions for lysing cells, and/or solutions for the purification of polypeptides.

15. The kit of claim 13, wherein the antibody is specific for adrenomedullin.